The Public Health Information Network and Early Detection

John W. Loonsk, M.D.

Associate Director for Informatics

Centers for Disease Control and Prevention

May 13th, 2003





Early Detection Principles

- 1. Syndrome data and the many new electronic data sources need to be rigorously evaluated
- 2. Early detection data based on the diagnostic skills of trained clinical personnel (e.g. diagnoses from ambulatory care settings) should be prioritized
- 3. Many of #2 are useful for public health in general and the reporting processes should support dual use
- 4. Strive to minimize reporting burden manual entry of syndrome data has limited roles
 - prospectively around major events
 - retrospectively after major occurrences





Early Detection Principles

- Deliver data to support comparative analysis and interpretation (vs. just alerts)
- Provide multiple data sources in a coordinated presentation to facilitate signal evaluation and minimize user burden
- When an alert or signal is found, support public health investigation through supplemental electronic queries for information





National Push for Bio-Protection

The President's Office has advanced initiatives to enhance national protection from bioterrorism:

- BioShield rapid development of new vaccines and therapeutics against biological threats
- BioWatch deployment of environmental air samplers in key locations to detect releases of certain biological agents
- BioSense proposal, being discussed with Health and Human Services, to enhance capability to rapidly detect bioterrorism by accessing and analyzing health data for bioterrorism indicators





National Data Sources

National Labs "Test Requests"

DoD and VA sentinel clinical data

Nurse Call Line Data

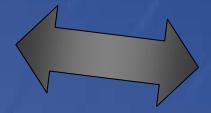
Over the Counter Drug Sales

Lab Response Network and BioWatch

Clinical Information
Systems







City Recipients



Health Activities Profiles





Outbreak Detection Alerting Capabilities

Metropolitan Surveillance and Response Systems

Data for Local Investigation and Detection





